



500.37136CX1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellants: NAGAI et al.  
Serial No.: 09/712,970  
Filed: November 16, 2000  
For: REPRODUCTION APPARATUS AND REPRODUCTION  
METHOD OF DIGITAL VIDEO SIGNAL OR AUDIO SIGNAL  
Group: 3625  
Examiner: N. Rosen

REPLY BRIEF

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GROUP 3600

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Commissioner of Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

February 3, 2004

Sir:

This Reply Brief is submitted on behalf of appellants in accordance with 37 CFR §1.193(b)(1) and is directed to the new points of arguments in the Examiner's Answer dated December 3, 2003. Additionally, submitted herewith is a Request for Oral Hearing in accordance with 37 CFR §1.194, which written request is accompanied by the fee set forth in 37 CFR §1.17(d) within two months from the date of the Examiner's Answer dated December 3, 2003.

Applicants note that the Examiner has submitted a corrected copy of the claims as an appendix to the Examiner's Answer which should be utilized.

In section **(11) Response to Argument**, the Examiner raises new points of argument which will be responded to essentially in the order presented in the Examiner's Answer, as set forth below.

### Appellants' Choice of Terminology

In the second paragraph at page 11 of the Examiner's Answer, the Examiner contends that "Appellants' choice of terminology is not ideal." (emphasis added) As correctly pointed out by the Examiner, appellants use the expression "recordable medium" to refer to a medium such as a DVD-RAM disk, and "medium dedicated to reproduction" to refer to a medium such as a DVD-ROM (read only memory) disk. Appellants submit that such representation as disclosed in this application is based upon the representation of a ROM/RAM disk being originated from a read-only memory and a rewritable memory LSI so that conventionally, the terminology with respect to ROM and RAM has been utilized as "reproduction only" and "recording-purpose", respectively. This terminology is well accepted in the art and is appropriately utilized in the description herein, irrespective of the Examiner's suggestions for other terminology which is not utilized in the specification, drawings and claims of this application.

### Use of "Official Notice" in Rejecting Claims

In the second full paragraph at page 12 of the Examiner's Answer and subsequent paragraphs including the first full paragraph at page 19 of the Examiner's Answer, the Examiner recognizes that features as recited in the dependent claims are not disclosed in Linnartz or Suzuki et al, with the Examiner contending that the utilization of "official notice" overcomes the requirement to cite evidence of what the Examiner contends is "well known". The Examiner contends that the decision cited by applicant of In re Lee is not relevant to the Examiner's taken of "official notice" to avoid the citation of art showing the features contended by the Examiner to be "well known". As pointed out in the decision of In re Lee at pages 1434 and 1435 of the decision:

The "common knowledge and common sense" on which the Board relied in rejecting Lee's application are not the specialized knowledge and expertise contemplated by the

Administrative Procedure Act. Conclusory statements such as those here provided do not fulfill the agency's obligation. This court explained in Zurko, 258 F.3d at 1385, 59 USPQ2d at 197, that "deficiencies of the cited references cannot be remedied by the Board's general conclusions about what is 'basic knowledge' or 'common sense.'" (emphasis added) The Board's findings must extend to all material facts and must be documented on the record, lest the "haze of so-called expertise" acquire insulation from accountability. "Common knowledge and common sense," even if assumed to derive from the agency's expertise, do not substitute for authority when the law requires authority...

The case on which the Board relies for its departure from precedent, In re Bozek, 416 F.2d 1385, 163 USPQ 545 (CCPA 1969), indeed mentions "common knowledge and common sense," the CCPA stating that the phrase was used by the Solicitor to support the Board's conclusion of obviousness based on evidence in the prior art. Bozek did not hold that common knowledge and common sense are a substitute for evidence, but only that they may be applied to analysis of the evidence. Bozek did not hold that objective analysis, proper authority, and reasoned findings can be omitted from Board decisions. ...

...when they rely on what they assert to be general knowledge to negate patentability, that knowledge must be articulated and placed on the record. The failure to do so is not consistent with either effective administrative procedure or effective judicial review. The board cannot rely conclusory statements when dealing with particular combinations of prior art and specific claims, but must set forth the rationale on which it relies. (emphasis added)

Thus, irrespective of the Examiner's position, appellants submit that the utilization of "official notice" to avoid presenting evidence of recited features of the claims on appeal in relation to a RAM, the structure and connection thereof as specified, on the basis that such features are considered to be "well known" as utilized by the Examiner in rejection of claims 2-5, 6 and 8-12, as set forth in the final rejection of May 15, 2003, is improper in light of the decision in In re Lee.

As to the Examiner's contentions concerning a seasonable challenge of the taking of "official notice", appellants note that the final rejection as set forth in the

Office Action dated May 15, 2003 utilized a different combination of art than that utilized in the prior rejection and therefore, the filing of the Notice of Appeal was a challenge to all rejections as contained in the final Office Action, none of which rejections appear in the prior Office Action. In fact, it is apparent that since the Examiner changed all rejections from that of the prior Office Action, the Examiner recognized that the claims as amended patentably distinguish over the prior rejections of record. As such, the Examiner's contentions concerning seasonable challenge do not relate to the rejection as set forth in the final Office Action. Further, appellants again submit that the Examiner has misconstrued the decision of In re Lee, and the Examiner nor the Board can avoid citing evidence in the form of art of record and cannot rely on "well known" to avoid the citation of art to support rejections.

#### The Disclosure of Linnartz

At page 14 of the Examiner's Answer, the Examiner states that "Specifically, Linnartz discloses a cryptographic watermark, data from which is passed through a cryptographic one-way function so that only one generation of copies (or some other fixed number of generations of copies) can be made. Thus, copying is not permitted and the outputting of data is stopped, if the reproduced information concerning copying consent indicates that copying once was permitted, but is no longer permitted, as set forth by Linnartz (column 3, lines 17-67; column 4, line 58, through column 5, line 2; column 6, lines 22-45)." (emphasis added) Appellants submit that Examiner's position does not relate to the disclosure of Linnartz, and appellants submit that Linnartz intends to solve the problem as described in column 3, more particularly, lines 21-27 of column 3 of the Linnartz patent. In the Linnartz solution, a watermark superimposed on information and a ticket transmitted via a route different from the route of the watermark are utilized. More particularly, each time once copied specified information is reproduced/recorded by a player/recorder, a "one way

function" processing is performed to the ticket to perform reproduction or recording control according to whether the processed result matches the watermark.

Additionally, as described in column 6, lines 31-33 of Linnartz, copy for "copy once" information is permitted once, but twice copying is not permitted, thus restricting the number of times of copy. This is realized by applying a "one-way function" processing to the ticket. In contradistinction, the object of the present invention is to restrict or prevent reproduction of a disk of a ROM type which can be mass produced and distributed and is representative of a "pirate copy". In any event, when permission for copying is not permitted, appellants submit that Linnartz fails to provide an indication that copying once was permitted.

The differences in configuration between the present invention and Linnartz are explained below with respect to the attached Fig. 1, wherein Fig. 1A represents the present invention and Fig. 1B shown in the upper portion represents Linnartz.

In Linnartz, a watermark and a ticket recorded on a disk are entered to a player/recorder through different paths from one another represented by arrows a, b, respectively. A signal reproduced from the disk is subjected to a one-way function processing 121 in the player and is subjected to two one-way function processings 131 and 132 in the recorder. At a comparator 133, the thus three-times one-way function processed ticket and the watermark are compared. If a match occurs, a disk 15 can be produced for recording. In two times recording, the ticket to the watermark is subjected to three-times one-way function processing and is therefore subjected to six-times one-way function processing when viewed from the watermark and the ticket in the second arrangement as illustrated in Fig. 1B, wherein a mismatch occurs to thereby prohibit recording on a disk 15'. Thus, Linnartz utilizes a match between two kinds of signals passed through different processing paths.

The present invention is based on an essential assumption that a copy-once signal is permitted only for information which is watched with a delay such as a broadcast program based on a time-shift concept and no such signal is used in a

non-rewritable medium such as a ROM disk. This results from the differences between a disk which is reproducible at any time as desired by the user, and information such as a broadcast program which is not so available. Based upon the technical background, the present invention provides for copy protection control based upon a finding that no "copy-once" signal is issued from a recording medium such as a ROM disk which is a medium dedicated to reproduction. Thus, in accordance with the present invention, if the medium under reproduction in which "copy-once" is recorded in a watermark (superimposed information) recording with recording a copying sent which is determined to be a ROM disk (i.e., a medium dedicated to reproduction), the medium is prohibited from reproducing, as being one of the ROM disks having recorded a broadcast program for the purpose of mass distribution and representative of a pirated copy. Thus, the present invention differs from Linnartz in that the present invention performs copy protection control by combining a copy control signal with an indication of the media being reproduced (ROM disk). On the other hand, Linnartz cannot prevent a pirated copy from being reproduced because the pirated copy disk does not have a ticket and a watermark as required by Linnartz.

Looking to independent claim 1, for example, this claim sets forth a wherein clause of "wherein the output control means stops outputting the error-corrected data if both (1) the error-corrected data was reproduced from the medium dedicated to reproduction and (2) the reproduced information concerning copying consent stored in the temporal store means indicates that copying once was permitted".

Accordingly, two conditions must be present and must somehow be determined to be present including that (1) the error-corrected data was reproduced from the medium dedicated to reproduction and (2) the reproduced information concerning copying consent stored in the temporal store means indicates that copying once was permitted, and is stored in a temporal store means, with the output control means being responsive to both conditions (1) and (2) occurring, as specified to stop

outputting of the error-corrected data. Irrespective of the position set forth by the Examiner, Linnartz does not disclose or teach the recited features of the independent claims and the stopping of reproduction of error-corrected data based upon the two conditions being present. Moreover, applicants submit that Linnartz essentially realizes a function of restricting a recording, whereas the present invention restricts reproduction and such differences alone patentably distinguish over Linnartz.

Referring again to the Examiner's statement in the paragraph bridging pages 13 and 14 of the Examiner's Answer regarding Linnartz that "Thus, copying is not permitted, and the outputting of data is stopped, if the reproduced information concerning copying consent indicates that copying once was permitted, but is no longer permitted...", appellants note that the claim language of each of the independent claims provides for stopping of outputting of the error-corrected data if "(2) the reproduced information concerning copying consent stored in the temporal store means indicates that copying once was permitted" (emphasis added) as set forth in claim 1, for example, and appellants submit that irrespective of the position set forth by the Examiner, Linnartz does not disclose or teach such feature in that when there is no permission mark present concerning permission for copying, there is no indication that copying once was permitted, and likewise, when such permission mark is present indicating that copying is permitted, copying is enabled. Thus, irrespective of any interpretation given by the Examiner, Linnartz does not disclose or teach the recited features of claim 1 and the similar features of each of the other independent claims of this application, noting that Linnartz does not disclose that the reproduced information concerning copying consent which is stored in a temporal store means indicates that copying once was permitted. Likewise, Linnartz does not disclose the additional condition referred to as condition (1) of the independent claims, such as that recited in claim 1 that the outputting of the error-corrected data is stopped if additionally, (1) the error-corrected data was reproduced

from the medium dedicated to reproduction, since there is no disclosure or teaching of such feature in Linnartz of such claimed feature, as recognized by the Examiner.

Suzuki et al

In the paragraph bridging pages 14 and 15 of the Examiner's Answer, the Examiner recognizes that "Linnartz does not teach that the data is error-corrected data, Suzuki being relied upon for that limitation...". The Examiner in such paragraph indicates that Linnartz states "that audio copies made from the professional disk lack the permission mark, and therefore cannot be further copied; thus, data reproduced from a professional disk/"medium dedicated to reproduction" and now present on a recordable disk cannot be further copied, and reproduction is stopped". (emphasis added) Appellants again note that Linnartz provides a function of restricted recording while the present invention provides a function of restricting reproduction. That is, reproduction is initiated and stopped upon the two conditions being present. There is no disclosure or teaching in Linnartz of stopping the reproduction of data upon occurrence of conditions (1) and (2) as set forth in the independent claims of this application, and there is no disclosure or teaching in Linnartz of the stopping of outputting of the error-corrected data in response to the two conditions being present, irrespective of the contentions by the Examiner. That is, while the Examiner attempts to misconstrue the claim language in terms of "only if", the fact remains that when both conditions (1) and (2) are present, irrespective of how such conditions are determined in accordance with the specific language of the claims, the reproduction of the error-corrected data is stopped and Linnartz does not disclose or teach such features in the sense of 35 U.S.C. 103.

At page 16 of the Examiner's Answer, it is indicated that "Examiner does recognize that Linnartz does not disclose all elements of the independent claims", with the Examiner contending that the missing elements are disclosed by Suzuki et al. Furthermore, the Examiner indicates that "Appellants argue that the patent



issued to Suzuki et al is not directed to the problem of illegal or pirated copying, which is true, but does not make Suzuki irrelevant to the case at hand". The Examiner further indicates that "Appellants further note that Suzuki provides no disclosure or teaching regarding the stopping of outputting of error-corrected data based upon conditions (1) and (2). The Examiner replies that Suzuki was not relied upon for doing this; Linnartz discloses stopping of the outputting of data as set forth above." As is apparent, irrespective of how the Examiner defines relevant art, appellants submit that Suzuki et al is not directed to the problem of the present invention or that of Linnartz, and the Examiner has merely selected various items from the prior art, as represented by Suzuki et al, contending that it would be obvious to combine the same in Linnartz, even though as pointed out by appellants, the disclosure of Suzuki et al was available to Linnartz, and the techniques disclosed in Suzuki et al thereby were obviously not chosen by Linnartz to be utilized in the Linnartz arrangement. Therefore, the rejection as set forth by the Examiner represents a hindsight reconstruction attempt of the present invention, irrespective of the fact that Linnartz does not disclose the stopping of outputting of error-corrected data in response to conditions (1) and (2). Thus, appellants again submit that the proposed combination of Linnartz and Suzuki et al is not proper and fails to provide the claimed features of the independent and dependent claims of this application.

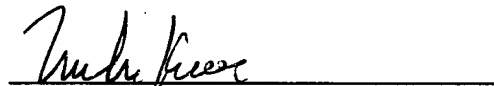
Furthermore, as pointed out above, and as recognized by the Examiner, even the proposed combination of Linnartz and Suzuki et al, as suggested by the Examiner, does not provide the claimed features of claims 2-6 and 8-12 in relation to a RAM, the structure and connection thereof, as recognized by the Examiner, who utilizes "official notice" to avoid presenting evidence of the prior art contending that such features are "well known". Appellants submit that this position by the Examiner is improper, and such claims further distinguish over the proposed combination in the sense of 35 U.S.C. 103. See In re Lee.

### CONCLUSION

In the last paragraph at page 22 of the Examiner's Answer, the Examiner states that "Examiner respectfully request the Board to judge the claims based on what they recite, and not on the basis of any description of the claims that differ from the actual limitations". Appellants request the same treatment, noting that the independent claims require conditions (1) and (2) to both occur for stopping the outputting of the error-corrected data, such that the stopping of the outputting of error-corrected data is responsive to the occurrence of both conditions, irrespective of how such determination that the occurrence of both conditions occurs. Appellants submit that Linnartz and Suzuki et al fail to disclose or teach the recited features of the independent and dependent claims in the sense of 35 U.S.C. 103 and the Board is urged to reverse the rejection as set forth by the Examiner.

To the extent necessary, applicant's petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 (500.37136CX1) and please credit any excess fees to such deposit account.

Respectfully submitted,



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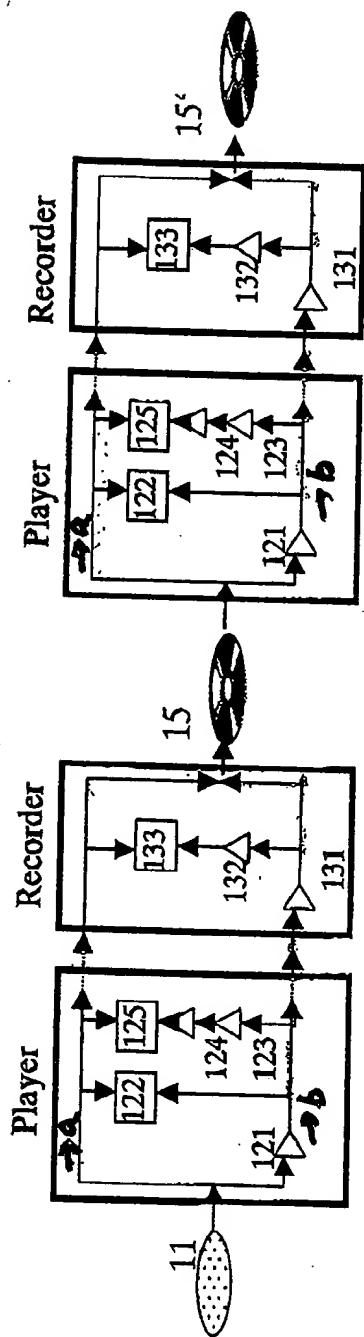
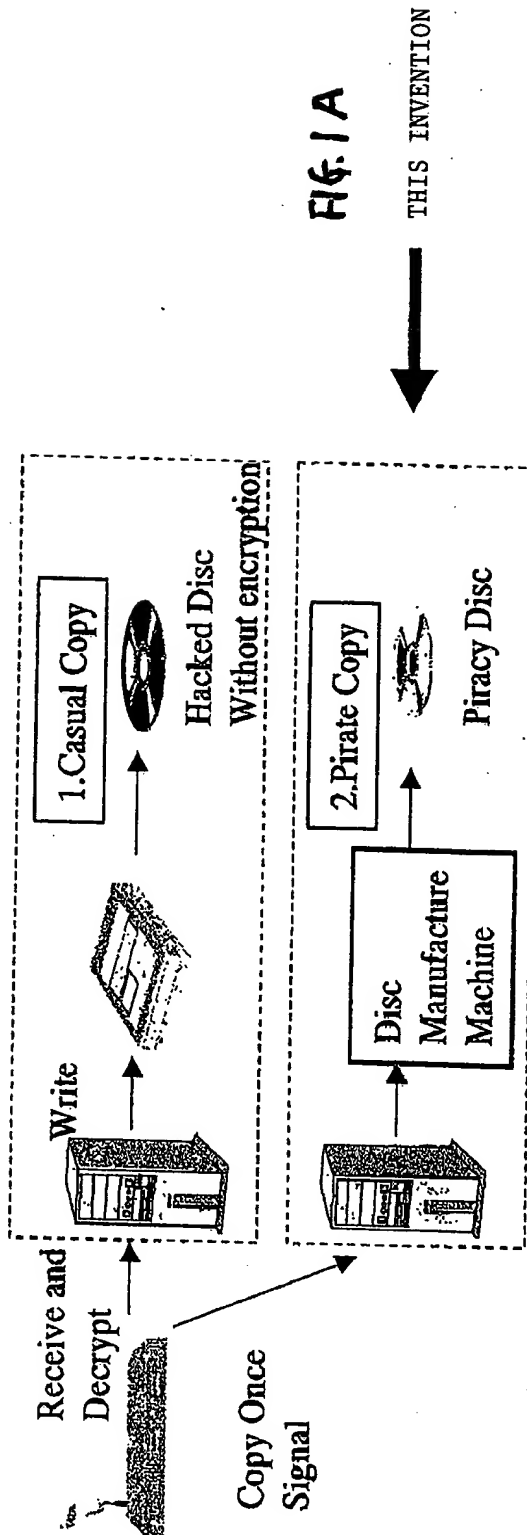


FIG 1B Linnartz Patent

FIG. 1A



ROM Disc Recordable Disc

FIG. 1. THE DIFFERENCE BETWEEN LINNARTZ AND THIS INVENTION



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Oral Hearing  
Ellis  
500.37136CX1 2-12-04

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REQUEST FOR ORAL HEARING

GROUP 3600

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P.O. Box 1450  
Alexandria, VA 22313-1450

February 3, 2004

Sir:

Appellants hereby request an oral hearing before the Board of Patent Appeals and Interferences in the appeal of the above-identified application. The fee in the amount of \$290.00 for this Request for Oral Hearing is submitted herewith by credit card payment form.

Respectfully submitted,

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